C2 72. The method of claim 71 wherein the dose of inhibitory composition is from about 1 mg/kg to about 5 mg/kg.

REMARKS

Claim 40 has been amended to recite that the method of the invention is directed to the use of certain inhibitory compositions to prevent or reverse the formation and growth of atherosclerotic lesions in a mammal. New claims 67-72 are directed to the use of inhibitory compositions comprising soluble P-selectins and soluble P-selectin ligands. Antecedent support for these amendments is found in the specification at pages 4, 5, 8, 9 and 15. Claims 40-42, 45, 49-53, 56, 59-60 and 67-72 are currently pending in this application.

Applicants acknowledge the Examiner's position regarding the restriction requirement as stated in the Office Action of August 16, 2000. The newly submitted and amended claims are directed to inhibitory compositions which are generic to the recited chimeric construct. See, for instance, page 9, lines 1-9 of the specification. Accordingly, the new and amended claims are properly within the scope of the previously elected claims.

In the Office Action of August 16, 2000, claims 64-66 were rejected under 35 U.S.C. 112, first paragraph, as containing subject matter not described in the specification. In particular, the Examiner has objected to the term "fusion protein" as used in these claims.

Claims 64-66, which are directed to fusion proteins, have now been cancelled without prejudice. Accordingly, this ground of rejection is not deemed to be moot.

Claims 40-42, 45, 49-50 and 64 have been rejected under 35 U.S.C. 101, as not being supported by either a specific asserted utility or a well-established utility. Specifically , the Examiner has stated that the prevention of restenosis is not supported in the specification or examples.

The claims have now been amended to delete a specific reference to the prevention of restenosis. Applicants note, however, that it is well known that preventing or reducing the

formation of lesions or plaques in blood vessels following surgery can assist in the prevention of restinosis.

Claims 40-42, 45, 49-53, 56, 59-62 and 64-66 stand rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the original specification. Specifically, the Examiner has stated that the written description contained in the specification does not show that applicant was in possession of a method for treating or preventing restenosis, or a method for treating or preventing atherosclerosis, using a chimeric construct or fusion protein as defined in the application. This rejection is respectfully traversed.

In response to the rejection, applicant points out that the active agents of this invention are now broadly described as soluble P-selectin, soluble P-selectin ligands, and portions thereof. Soluble chimeric constructs as a subset of this more generic class of compounds.. Specific support for the soluble chimeric constructs is found on pages 6 and 9 of the application. Page 9 states that the soluble forms of P-selectin include truncated soluble secreted forms, proteolytic fragments, other fragments, and chimeric constructs formed by at least a portion of P-selectin or ligand and another molecule. In addition, the specification states that soluble forms of P-selectin can be found in Mulligan et al., *J. Immunol.,* 151, pages 6410-6417 (1983), and Sako et al., *Cell*, 75, pages 1179-1186 (1993). Accordingly, the inhibitory compositions of this invention are fully enabled by the specification.

Although applicants have not listed every ligand which can bind to P-selectin, applicants have provided representative examples of both classes of ligands, such as carbohydrates and inhibitory proteins, as well as specific molecules included within the claims, such as PSGL-1. Based on this information, one skilled in the art would have possession of those moieties which bind P-selectin in accordance with the methods of the present invention. This also applies to fragments which are simply parts of the recited molecule performing the same intended function. One skilled in the art would readily understand how to prepare such fragments from the claimed molecules. It may be that the claimed field of operable compounds is large, but as long as applicants invention can be readily discerned by those skilled in the art, the actual number of such compounds does not render the invention non-enabling.

Claims 40-42, 45, 49-53, 56, 59-62 and 64-66 also stand rejected under 35 U.S.C. 112, first paragraph, as containing subject matter not described in the specification. The Examiner states that no specific examples are provided with regard to the claimed fusion proteins or chimeric constructs. Moreover, the Examiner states that the example provided is insufficient to establish that applicants had possession of a method for treating atherosclerosis. This ground of rejection is traversed, and reconsideration is requested.

The specification describes a method for treating or preventing atherosclerosis. The method involves the use of certain compositions which inhibit P-selectin function, and specifically compositions which inhibit the interaction of P-selectin and P-selectin ligands. Applicants have disclosed that such inhibition prevents the formation of lesions or plaque in arteries and blood vessels. This fact is substantiated by Example 1 which shows that mice which do not express P-selectin have statistically significant decreases in the size of atherosclerosis lesions. At the very least, this is certainly strong empirical evidence which would permit one skilled in the art to conclude that the inhibition of P-selectin directly leads to a reduction in the number and size of lesions. Such lesions are known to contribute to atherosclerosis in mammals. Accordingly, applicant believes that the present specification fully supports a method for treating and preventing atherosclerosis.

Claims 45, 56 and 62 have been rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to point out and distinctly claim the invention. The Examiner states that the term “PSGL-1 renders the claim indefinite because it is not defined. This ground of rejection is traversed.

The term "PSGL-1” is well known in the art as shown by the Saki et al. reference discussed above and cited in the Office Action. See pages 1 and 2 of Saki et al. which define PSGL-1 as “P-selectin glycoprotein ligand-1”, and provide both the DNA and amino acid sequences for this protein. Accordingly, PSGL-1 has been established as a well known protein, and this ground of rejection is improper and should be withdrawn.

Claims 61-62 and 66 stand rejected under 35 U.S.C. 102(b) as being anticipated by Sako et al. Claims 61 and 66 have also been rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,412,123. These grounds of rejection are traversed.

Claims 61-62 and 66 have been cancelled from this application without prejudice. Accordingly, these grounds of rejection have been effectively obviated.

In view of the foregoing remarks and considerations, this application is now believed to overcome the rejections in the Office Action, and to fulfill all requirements for patentability. Accordingly, reconsideration and withdrawal of the rejections, and allowance of the remaining claims in this application, are solicited. The Examiner is invited to contact the undersigned attorney at the telephone number listed below if this would advance the prosecution of this application.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, applicant hereby requests any necessary extension of time. If there is a fee occasioned by this response, including an extension fee that is not covered by an enclosed check, please charge any deficiency to Deposit Account No. 23/2825.

Respectfully submitted

By: William G. Gosz

William G. Gosz, Reg. No. 27,787
Wolf, Greenfield & Sacks, P.C.
600 Atlantic Avenue
Boston, Massachusetts 02210-2211
Tel. No.: (617) 720-3500
Attorney's for Applicant(s)

Docket No. C0279/7027
Date: January 26, 2001
X02/16/01